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12 UNITED STATES DISTRICT COURT

13 NORTHERN DISTRICT OF CALIFORNIA

14 SAN FRANCISCO DIVISION

15 SONOS, INC.,

16 Plaintiff,

17 vs.

18 GOOGLE LLC,

19 Defendant.

CASE NO. 3:20-cv-06754-WHA

Related to CASE NO. 3:21-cv-07559-WHA

GOOGLE'S MOTION FOR SUMMARY JUDGMENT

The Hon. William H. Alsup

Date: March 23, 2023

Time: 8:00 a.m.

Location: Courtroom 12, 19th Floor

1 **NOTICE OF MOTION AND MOTION FOR SUMMARY JUDGMENT**

2 TO ALL PARTIES AND THEIR ATTORNEYS OF RECORD:

3 PLEASE TAKE NOTICE THAT, pursuant to the Court’s Scheduling Order (Dkt. 434), on
4 March 23, 2023, at 8:00 a.m., or as soon thereafter as the matter may be heard, in Courtroom 12,
5 19th Floor, of the San Francisco Courthouse, 450 Golden Gate Avenue, San Francisco, California
6 94102, before the Honorable William Alsup, Google LLC (“Google”) will and hereby does move
7 for an order granting summary judgment on the following grounds: (i) claims 1- 2, 4, 9, 11-13, and
8 16 of U.S. Patent No. 10,779,033 (the “’033 patent”) are invalid under 35 U.S.C. §§ 102 and 103;
9 (ii) claims 1-2, 4, 6, 8-10, 12, 14 and 16 of U.S. Patent No. 10,469,966 (the “’966 patent”) and claim
10 1 of U.S. Patent No. 10,848,885 (the “’885 patent”) are invalid under 35 U.S.C. §§ 102 and 103;
11 (iii) Google does not infringe claim 1 of the ’966 patent; and (iv) Google does not willfully or
12 indirectly infringe the asserted patents.

U.S. Patent No. 10,779,033 Claim 1

[1.0] A computing device comprising:

[1.1] at least one processor;

[1.2] a non-transitory computer-readable medium; and

[1.3] program instructions stored on the non-transitory computer-readable medium that, when executed by the at least one processor, cause the computing device to perform functions comprising:

[1.4] operating in a first mode in which the computing device is configured for playback of a remote playback queue provided by a cloud-based computing system associated with a cloud-based media service;

[1.5] while operating in the first mode, displaying a representation of one or more playback devices in a media playback system that are each i) communicatively coupled to the computing device over a data network and ii) available to accept playback responsibility for the remote playback queue;

[1.6] while displaying the representation of the one or more playback devices, receiving user input indicating a selection of at least one given playback device from the one or more playback devices; (b) causing playback at the control device to be stopped; and (c) modifying the one or more transport controls of the control interface to control playback by the playback device; and

[1.7] based on receiving the user input, **[1.7(a)]** transmitting an instruction for the at least one given playback device to take over responsibility for playback of the remote playback queue from the computing device, **[1.7(b)]** wherein the instruction configures the at least one given playback device to (i) communicate with the cloud-based computing system in order to obtain data identifying a next one or more media items that are in the remote playback queue, (ii) use the obtained data to retrieve at least one media item in the remote playback queue from the cloud-based media service; and (iii) play back the retrieved at least one media item;

[1.8] detecting an indication that playback responsibility for the remote playback queue has been successfully transferred from the computing device to the at least one given playback device; and

[1.9] after detecting the indication, transitioning from i) the first mode in which the computing device is configured for playback of the remote playback queue to ii) a second mode in which the computing device is configured to control the at least one given playback device's playback of the remote playback queue and the computing device is no longer configured for playback of the remote playback queue.

U.S. Patent No. 10,848,885 Claim 1

[1.0] A first zone player comprising:

[1.1] a network interface that is configured to communicatively couple the first zone player to at least one data network;

[1.2] one or more processors;

[1.3] a non-transitory computer-readable medium; and

[1.4] program instructions stored on the non-transitory computer-readable medium that, when executed by the one or more processors, cause the first zone player to perform functions comprising:

[1.5] while operating in a standalone mode in which the first zone player is configured to play back media individually in a networked media playback system comprising the first zone player and at least two other zone players:

[1.6] (i) receiving, from a network device over a data network, a first indication that the first zone player has been added to a first zone scene comprising a first predefined grouping of zone players including at least the first zone player and a second zone player that are to be configured for synchronous playback of media when the first zone scene is invoked; and

[1.7] (ii) receiving, from the network device over the data network, a second indication that the first zone player has been added to a second zone scene comprising a second predefined grouping of zone players including at least the first zone player and a third zone player that are to be configured for synchronous playback of media when the second zone scene is invoked, wherein the second zone player is different than the third zone player;

[1.8] after receiving the first and second indications, continuing to operate in the standalone mode until a given one of the first and second zone scenes has been selected for invocation;

[1.9] after the given one of the first and second zone scenes has been selected for invocation, receiving, from the network device over the data network, an instruction to operate in accordance with a given one of the first and second zone scenes respectively comprising a given one of the first and second predefined groupings of zone players; and

[1.10] based on the instruction, transitioning from operating in the standalone mode to operating in accordance with the given one of the first and second predefined groupings of zone players such that the first zone player is configured to coordinate with at least one other zone player in the given one of the first and second predefined groupings of zone players over a data network in order to output media in synchrony with output of media by the at least one other zone player in the given one of the first and second predefined groupings of zone players.

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<i>CommScope Techs. LLC v. Dali Wireless Inc.</i> , 10 F.4th 1289 (Fed. Cir. 2021)	9
<i>Cybiotronics, Ltd. v. Golden Source Elecs. Ltd.</i> , 130 F. Supp. 2d 1152 (C.D. Cal. 2001)	25
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<i>Optivus Technology, Inc. v. Ion Beam Applications S.A.</i> , 469 F.3d 978 (Fed. Cir. 2006)	18
<i>Power Integrations, Inc. v. ON Semiconductor Corp.</i> , 396 F. Supp. 3d 851 (N.D. Cal. 2019)	25
<i>Sonos, Inc. v. Google LLC</i> , 591 F. Supp. 3d 638 (N.D. Cal. 2022)	24

STATUTORY AUTHORITIES

35 U.S.C. § 102(a)	17
35 U.S.C. § 102(b)	16

ADDITIONAL AUTHORITIES

https://www.youtube.com/watch?v=5VF1uR9pJdo	15
https://www.youtube.com/watch?v=EGdsOslqG2s	3
U.S. Patent No. 11,290,769,	4
U.S. Patent No. 8,724,600	15
U.S. Patent No. 9,490,998	1

TABLE OF EXHIBITS

Exhibit No.	Description
1	January 23, 2023 Reply Report of Dr. Dan Schonfeld Regarding U.S. Patent No. 10,848,885 and U.S. Patent No. 10,469,966
2	January 23, 2023 Reply Expert Report of Dr. Kevin C. Almeroth
3	November 30, 2022 Opening Expert Report of Dr. Kevin C. Almeroth
4	INTENTIONALLY OMITTED
5	January 13, 2023 Rebuttal Expert Report of Dan Schonfeld, Ph.D.
6	January 13, 2023 Rebuttal Expert Report of Dr. Kevin C. Almeroth
7	INTENTIONALLY OMITTED
8	November 30, 2022 Opening Expert Report of Dr. Dan Schonfeld Regarding U.S. Patent No. 10,848,885 and U.S. Patent No. 10,469,966
9	Transcript from the June 29, 2022 Deposition of Nick Millington
10	Chart identifying how the disclosures meeting the '885 patent claim elements discussed also render obvious the asserted claims of the '966 patent
11	November 30, 2022 Opening Expert Report of Samrat Bhattacharjee Regarding Invalidity of U.S. Patent Nos. 10,779,033 and 9,967,615 and Other Issues
12	January 23, 2023 Reply Expert Report of Samrat Bhattacharjee Regarding Non-Infringement of U.S. Patent No. 10,779,033 and Other Issues
13	Document bearing starting bates number SONOS-SVG2-00026888
14	January 13, 2023 Rebuttal Expert Report of Douglas C. Schmidt
15	INTENTIONALLY OMITTED
16	INTENTIONALLY OMITTED
17	Transcript from the January 6, 2023 Deposition of Janos Levai
18	Document bearing starting bates number GOOG-SONOSNDCA-00075593
19	Transcript from the February 2, 2023 Deposition of Douglas Schmidt
20	INTENTIONALLY OMITTED
21	January 13, 2023 Rebuttal Expert Report of Samrat Bhattacharjee Regarding Non-Infringement of U.S. Patent No. 10,779,033 and Other Issues
22	Document bearing starting bates number GOOG-SONOSWDTX-00041617

1 **I. INTRODUCTION**

2 In the patent showdown, the Court held that the claim 13 of the '615 patent was invalid and
3 not infringed, and Sonos thereafter dropped the remaining claims. Google now moves for summary
4 judgment that the asserted claims of the related '033 patent are invalid based on a version of the
5 same YouTube Remote ("YTR") product that invalidated the '615 patent. Google also moves for
6 summary judgment of invalidity of the asserted '885 and '966 patent claims based on
7 straightforward modifications to Sonos's own prior art products, including the ability to save
8 speaker groups, that were contemporaneously suggested by Sonos's users on public web forums.

9 Also during the showdown procedure, the Court found that Google's products infringed
10 claim 1 of the '885 patent, which relates to speaker grouping. In light of this, Google immediately
11 began developing and deploying a new design that eliminates from the accused products the claimed
12 "standalone mode"—required by each of the asserted '885 and '966 claims. Google thus moves for
13 summary judgment that its redesigned products cannot infringe.

14 Finally, Google moves for summary judgment that Sonos has failed to prove Google had
15 knowledge or intent to infringe the asserted patents, as required for willful and indirect infringement.

16 **II. STATEMENT OF ISSUES TO BE DECIDED**

17 Whether Google is entitled to summary judgment that: (1) claims 1, 2, 4, 9, 11-12, 13 and
18 16 of the '033 patent are rendered obvious by the YouTube Remote v2 prior art system in further
19 view of the general knowledge of a person of skill and/or the YouTube Remote patent ([U.S. Patent](#)
20 [No. 9,490,998](#)); (2) claim 1 of the '885 patent and claims 1, 2, 4, 6, 8, 9, 10, 12, 14, and 16 of the
21 '966 patent ("asserted '966 claims") are rendered obvious by the Sonos 2005 System in view of the
22 Sonos Forums; (3) Google's redesigned products do not infringe the asserted '966 claims and claim
23 1 of the '885 Patent; and (4) Google did not willfully or indirectly infringe the asserted patents.

24 **III. LEGAL STANDARD**

25 The Court's prior summary judgment order sets forth the proper standard. Dkt. 316 at 4.

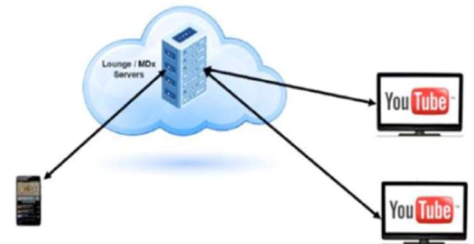
26 **IV. ARGUMENT**

27 **A. The Asserted Claims Of The '033 Patent Are Invalid Over Version 2 Of The**
28 **YouTube Remote Application In View Of The YouTube Remote Patent**

1 Sonos accused Google's current YouTube applications of infringing its '615 and '033
 2 patents. Both claim priority through a series of continuation applications to U.S. Patent Application
 3 No. 13/341,237, filed on December 30, 2011, and include the same inventors, written description
 4 and figures. Dkt. 1-3 ('033 patent), Dkt. 1-2 ('615 patent). The Court has already entered summary
 5 judgment of invalidity with respect to claim 13 of the '615 patent. The Court should now enter
 6 summary judgment of invalidity with respect to the asserted claims of the '615 patent.

7 B. Overview Of The Prior Art YTR

8 The YTR application included (i) a mobile
 9 device running a version of the YTR application, (ii) a
 10 "Lounge Server" (also referred to as an "MDx Server"),
 11 and (iii) one or more playback devices or "screens" (e.g.,



12 TVs). Google released Version 1.0 of the prior art YTR application ("YTR1") on November 9,
 13 2010. Dkt. 210-11 (Levai Decl), ¶ 4; Dkt. 211-9 (Bobohalma Decl) ¶ 3. Versions 2.03 and 2.07 of
 14 the YTR application (collectively, "YTR2") were released on July 29, 2011 and August 10, 2011
 15 respectively. *See*

16 [https://web.archive.org/web/20110822085859/https://www.appbrain.com/app/youtube-](https://web.archive.org/web/20110822085859/https://www.appbrain.com/app/youtube-remote/com.google.android.ytremote)
 17 [remote/com.google.android.ytremote](https://web.archive.org/web/20110822085859/https://www.appbrain.com/app/youtube-remote/com.google.android.ytremote) . Version 3 ("YTR3") was released in January of
 18 2012. Accordingly, YTR1 and YTR2 were released well before Sonos's December 30, 2011
 19 priority date, and YTR3 was released less than a month later.

20 Both of the YTR1 and YTR2 applications allowed a user to play back queues of YouTube
 21 videos on a phone. For example, a user could select videos to add to a user-created queue by
 22 pressing the "+" icon next to a video. Ex. 11 ¶¶ 166-69, 181; Ex. 12 ¶¶ 79-81. Those videos
 23 appeared in a tab called "Queue" in the YTR application and could be played on the user's
 24 phone. Users could also play back a list of system-generated recommended videos. *Id.*

25 Both of the YTR1 and YTR 2 applications also allowed users to transfer playback to one or
 26 more playback devices (e.g., TVs). YTR1 and YTR2 included a "Connect" button that could
 27 transfer playback to all available playback devices. By December 1, 2011, Google had added a
 28 "device-picker" that allowed users to transfer playback to one or more selected playback devices;

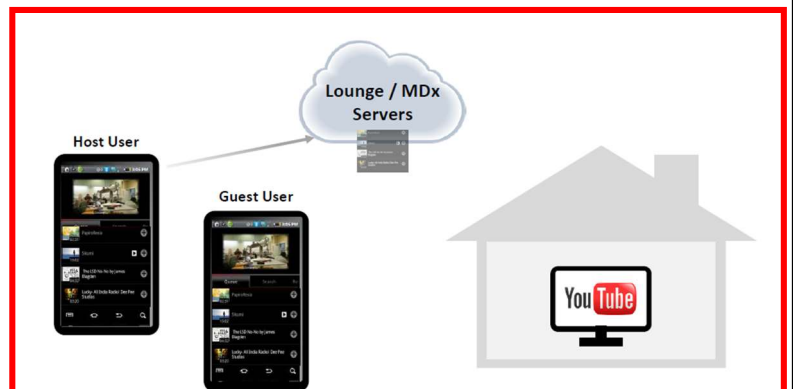
1 this device-picker was released in YTR3 (*see infra*, § IV.B.2). After transferring playback, YTR
 2 stopped playback on the mobile device and displayed a “Connected to Leanback screen.” The
 3 mobile device would then serve as a “remote control” for controlling playback on the playback
 4 device(s). Dkt. 210-3 (Bhattacharjee Declaration) ¶ 136; *see also*
 5 <https://www.youtube.com/watch?v=EGdsOslqG2s> (uploaded 11/14/2010).

6 1. “Party Mode”

7 After the release of YTR1 on November 9, 2010, Google continued to add features to the
 8 YTR prior art. By July 12, 2011, Google had reduced to practice “party mode.” Ex. 11 ¶¶ 170-
 9 77. Google launched party mode in YTR2. Ex. 17 at 29:21-24; Ex. 18 (“Party Mode . . . Launched
 10 in version 2”).

11 A host user (Alice) selects her user-created queue or a list of YouTube recommended videos
 12 for playback on her mobile device. Ex. 11 ¶¶ 171-72; *see also* Ex. 19 at 90:14-93:5, 184:25-

13 185:9. Alice initiates party mode by
 14 using YTR2 to invite a guest user
 15 (Bob) to the party. Ex. 11 ¶¶ 171-72;
 16 *see also* Ex. 19 at 85:14-24, 93:6-9,
 17 182:5-11. Alice’s YTR2 sends a
 18 message to the Lounge Server with a



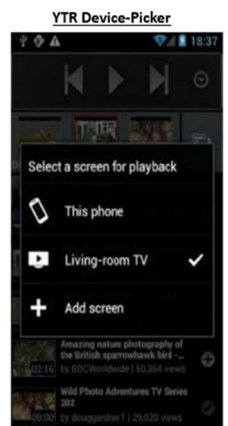
19 list of identifiers (videoIds) for the videos that she selected for playback, and the Lounge server
 20 stores the list of videoIds in a “party queue.” Ex. 11 ¶¶ 171-73; *see also* Ex. 19 at 93:6-94:4, 89:24-
 21 90:7, 94:5-20, 99:19-100:2, 100:7-15, 104:21-105:25, 181:11-18, 182:5-11, 184:25-185:9. If Bob
 22 accepts Alice’s invitation, the Lounge Server provides Bob’s YTR2 with the list of videoIds in the
 23 party queue. Ex. 11 ¶¶ 171, 174-75; *see also* Ex. 19 at 96:6-9, 185:10-20. So long as Alice and Bob
 24 are in party mode, they can play back the party queue on their phones or transfer playback of the
 25 party queue to Alice’s playback device(s). Ex. 11 ¶¶ 171, 174-75; *see also* Ex. 19 at 74:14-24,
 26 76:17-77:4, 98:13-99:6, 180:25-9.

27 Alice and Bob each can also edit and manage the remote party queue. Ex. 11 ¶¶ 172-74,
 28 176; Ex. 12 ¶¶ 62-64. When either Bob or Alice makes a change to the queue using YTR2 on their

1 mobile device, the edit is provided to the Lounge Server, which makes the change to the party
 2 queue. Ex. 11 ¶¶ 172-74; Ex. 12 ¶¶ 62-64 (showing Lounge Server performs queue management
 3 for the party queue, including functions like “add” to the queue, “remove” from the queue, “move”
 4 items in the queue). After the Lounge Server makes the change, the Lounge Server sends a message
 5 to the mobile and playback devices in the party containing an updated list of the videoIds in the
 6 party queue—e.g., if the “party queue” had three videos and Bob used his YTR2 application to add a
 7 fourth video, Bob’s YTR2 application would send a message to the Lounge Server, the Lounge
 8 Server would update the party queue so that it contains the fourth video, and the Lounge Server
 9 would then send a list of videoIds for the four videos in the updated party queue to Alice’s (and
 10 Bob’s) mobile device and the playback device(s) in the party. *Id.*; see also Ex. 19 at 188:25-190:10,
 11 192:2-17, 193:8-23, 194:14-196:23. As the source code states, in party mode, the “definitive version
 12 of the playlist lives on the server [in a “party queue”], and multiple remote control[s] [YTR
 13 applications] can change it at the same time”—it is a “remote queue.” Ex. 11 ¶¶ 176-77 (citing
 14 `SharedPlaylistContentService.java` and `RemoteQueueManager.java`).

15 2. Device-Picker

16 By December 1, 2011, Google added a “device-picker” to the source
 17 code for the YTR application. Ex. 11 ¶ 187. The device-picker was released
 18 in YTR3 in January of 2012. As this Court has already found, the device-
 19 picker was also described in the ’998 patent that Google filed on March 7,
 20 2011. See Dkt. 316 at 16-17. The ’998 patent is based on Google’s work on
 21 the YTR application and teaches that a “remote control” (e.g., mobile phones
 22 running the YTR application) can provide a display that allows users to select individual playback
 23 devices. *Id.*; see also ’998 Patent at 10:62-11:6.¹



24 C. The Court Found That Version 1 Of The YTR Application Invalidates Claim

25
 26 ¹ In view of the specification’s disclosure, a continuation of the ’998 patent claims “a user interface
 27 to be presented on a display of the remote control, wherein the user interface presents a plurality of
 28 previously paired controlled devices for selection; receiving, via the user interface, a selected
 controlled device from the plurality of previously paired controlled devices.” [U.S. Patent No. 11,290,769](#), Claim 1.

13 Of The '615 Patent

Claim 13 of the '615 patent was found invalid during the patent showdown. It claims a “control device” (*e.g.*, a mobile phone) that [1] can play back media on the control device, [2] identify and display playback devices connected to the network for selection by a user, [3] receive a user input indicating a selection of a particular playback device(s) from the identified playback devices, [4] transfer playback from the control device to the particular playback device(s), and then [5] stop playback at the control device and modify the transport controls (*e.g.*, pause, skip, next, etc.) of the control device to control playback on the playback device. Claim 13 also recites that “transferring playback from the control device to the particular playback device comprises: [] causing one or more first cloud servers to add multimedia content to a local playback queue on the particular playback device.” Dkt. 316 at 3-4.

The Court held that YTR1 disclosed every limitation of claim 13 except one: the ability for a user to select a “particular playback device from the identified playback devices.” *Id.* at 11-17. However, the Court held it would have been obvious to add a device-picker to the YTR prior art that allowed for “the selection of individual devices,” as this feature was disclosed in the '998 patent and added to the YTR application prior to Sonos’s December 30, 2011 priority date. *Id.* at 15-17; *see supra* § IV.B.2. In fact, numerous prior art devices used a device-picker, including Apple’s iPhones and prior art Sonos products. Dkt. 210-3 (Bhattacharjee Declaration) ¶ 173.

D. The Asserted Independent Claims Of The '033 Patent Are Obvious

Sonos has asserted two independent claims from the '033 patent: claims 1 and 12. They recite identical limitations, with one claim directed to a device and another to a “computer readable medium.” Like (now-invalidated) claim 13 of the '615 patent, claims 1 and 12 of the '033 patent recite a “computing device” (*e.g.*, a mobile phone) that is able to play back media (*e.g.*, videos) and then transfer playback to a playback device (*e.g.*, a TV). The primary difference between (invalid) claim 13 of the '615 patent and the claims of the '033 patent is that the latter requires playback of a “remote playback queue provided by a cloud-based computing system.” Version 2.0 of the YouTube Remote system discloses this “remote **playback** queue.”

Sonos contends that the asserted independent claims of the '033 patent are valid for two

1 reasons: (1) that YTR2 does not satisfy Limitations 1.4 and 1.7-1.9 because it is not configured to
 2 play back a “remote playback queue”; and (2) that YTR2 does not satisfy Limitations 1.5-1.6 by
 3 rearguing what the Court rejected during the Patent Showdown—that it was not obvious to combine
 4 the YTR application with the device-picker of the ’998 patent. Neither of these arguments has merit.

5 1. Remote Playback Queue Limitations (Limitations 1.4, 1.7-1.9)

6 The Court construed the term “playback queue” to mean “a list of multimedia content
 7 selected for playback.” Dkt. 316 at 5. For purposes of infringement, Sonos contends that the term
 8 “remote” does not require a playback queue provided by a third-party application but requires only
 9 a “playback queue” that is geographically distant from the computing and playback devices. Thus,
 10 “a list of multimedia content selected for playback” (*i.e.*, a playback queue) that is provided by a
 11 cloud-based computing system is a “remote playback queue” if it is not local to the computing or
 12 playback devices. YTR2 disclosed a “remote playback queue.”

13 (a) Limitation 1.4

14 Limitation 1.4 recites a “computing device” that is operating in a “first mode” in which it is
 15 “configured for playback of a remote playback queue provided by a cloud-based computing system
 16 associated with a cloud-based media service.” It is undisputed that (i) a mobile phone running YTR2
 17 is a “computing device” and (ii) when the phone is playing back media, it is in a “first mode.” Ex.
 18 11 ¶ 297; *see also* Ex. 19 at 76:17-77:4. Sonos disputes only whether YTR2 is “configured for
 19 playback of a remote playback queue.” The YTR2 application is “configured for playback of a
 20 remote playback queue” for two independent reasons. Ex. 11 ¶ 298.

21 (i) Party mode

22 First, YTR2 is “configured for playback of a remote playback queue” when it operates in
 23 party mode. In the context of party mode, it is undisputed that the Lounge Server stores the list of
 24 videos that have been “selected for playback” in what the source code refers to as a “party
 25 queue.” Ex. 19 at 184:25-185:17 (“Q. A user creates a party playlist and it has three videos that
 26 have been selected for playback, video 1, video 2, video 3. In party mode, the party playlist is
 27 provided to the lounge server and stored as a party playlist on the lounge server that contains video
 28 1, video 2 and video 3. Do you agree with me on that? A. In that hypothetical, under some

assumptions I can imagine a world where that would happen, yes.”), 90:22-7 (noting the source code’s reference to the “party queue”). Because the party queue is “a list of multimedia content selected for playback,” it is a “playback queue” under the Court’s construction.

It is also undisputed that the Lounge Server provides the party queue to the phones of host and guest users (“computing devices”) so that those users play back those videos on their phones. *Id.* at 80:8-12, 94:14-20; *see also supra*, § IV.B.1. For example, when Alice initiates party mode by inviting Bob, the Lounge Server stores identifiers for the list of videos Alice selected for playback in a “party queue,” and the Lounge Server then provides the phones and playback devices in the party with that party queue. *See supra*, § IV.B.1. If Bob edits it, that edit will be made in the party queue on the Lounge Server, and then the Lounge Server will send the new list of video identifiers in the party queue to the phones and the playback devices in the party. *See id.* Thus, because the Lounge Server that stores the party queue is geographically distinct from the users’ phones and playback devices, those phones are configured for playback of a “remote playback queue provided by a cloud-based computing system.” Indeed, the source code for YTR2 expressly states that party mode uses a “remote queue”:

* Content service implementation for *party mode*. The *definitive version of the*

** playlist lives on the server, and multiple remote controls can change it at*

** the same time.*

...

* Manages a *remote queue (usually a party queue)*.

Ex. 11 ¶¶ 176-77; Ex. 12 ¶ 63-64 (emphasis added).

Sonos raises several arguments in an attempt to show the YTR2 application is not configured to play back a “remote playback queue” when in party mode. None have merit.

First, Sonos argues that, in the YTR2 system’s party mode, “there can only be *one* playback queue, which is either remote or local (but not both).” Dkt. No. 467-5 ¶ 108. Sonos reasons that because, in party mode, the Lounge Server provides Alice and Bob’s phones with the list of videos in the party queue, Alice and Bob’s phones are configured to playback a local copy of the party queue (i.e., a copy on the phones)—not the remote copy of the party queue.

Initially, Sonos’s argument is inconsistent with its infringement positions, where it has stated that “just because a sender device might *maintain* a local copy of a queue does not necessarily mean that there is not also “a remote playback queue *provided by* a cloud-based computing system associated with a cloud-based media service.” Indeed, Sonos alleges that the accused YouTube applications infringe the remote playback queue limitation of the ’033 patent’s asserted claims when they are configured to play back a local queue that was constructed from a remote queue. Ex. 21 ¶¶ 65-70, 166-71; Ex. 22 at -618 (“A music container entity (*i.e.* album, radio) is added to a local queue when users play it locally on the YTM mobile apps.”).

Further, even accepting Sonos’s argument that a device can be configured to play back only one queue, that queue would be a “remote playback queue” in YTR2. In this regard, the Court’s order granting Google summary judgment of non-infringement of claim 13 of the ’615 patent (which recited that a playback device stores a “local playback queue”) is instructive. In the order, the Court explained that playback devices in Google’s accused systems play back a “cloud queue.” Dkt. 316 at 9-10. The Court reasoned that the cloud queue stored the definitive copy of the queue and dictated what the playback devices would play back:

The songs set to play on Google Play Music, for example, are all dictated by the cloud queue. If the user adds or edits a playlist, the cloud queue changes. If the app creates a playlist, the cloud queue adapts. It is only after the cloud queue changes that anything can happen to the information stored locally on the playback device (see Bhattacharjee Decl. ¶¶ 81–84).

Dkt. 316 at 10 (emphasis added). The same is true in YTR2’s party mode. If a user adds, edits, or otherwise modifies the queue using YTR2, the party queue stored on the cloud server changes, and it is only *after* the cloud queue changes that updated information is sent to the mobile devices and playback devices in the party. Ex. 19 at 196:18-23; *see also* Ex. 12 ¶¶ 63-64. In fact, the source code expressly states that the “definitive version of the playlist lives on the server [in a “party queue”], and multiple remote control[s] [YTR applications] can change it at the same time.” Ex. 11 ¶¶ 176-77 (citing `SharedPlaylistContentService.java`). The party queue runs the show by dictating the videos that should play on the devices in the party.

Second, Sonos argues that, in party mode, mobile devices and playback devices use their “own locally-stored copy of the queue for playback without any dependency on the copy of the playlist on the Lounge Server.” But Sonos’s expert admitted that mobile devices and playback devices depend on the party queue to receive the current list of videos selected for playback. For example, Dr. Schmidt conceded that if Bob uses his YTR2 application to add a video to the party queue, the party queue stored on the Lounge Server will be updated, and other devices in the party (e.g., Alice’s mobile phone or playback devices) will not have the complete list of multimedia content selected for playback until the Lounge Server provides them with a copy of the new party queue. Ex. 19 at 194:15-195:12 (“Q. Dr. Schmidt, so in that example, prior to the playback devices receiving the update from the lounge server, the lounge server will have four items, four videos, video 1, video 2, video 3 and video 4, whereas the playback devices will only have videos 1, 2 and 3; correct? A. Under a certain set of assumptions, that’s possible, but there’s other scenarios that might be different.”). In other words, the locally stored copy of the party queue may become outdated when Alice or Bob make an edit, such that only the remote queue contains the list of multimedia content “selected for playback.” The Lounge Server is the “source of truth” for the list of videos that have been selected for playback, and other devices in the party depend on the Lounge Server to obtain the list of videos for playback.

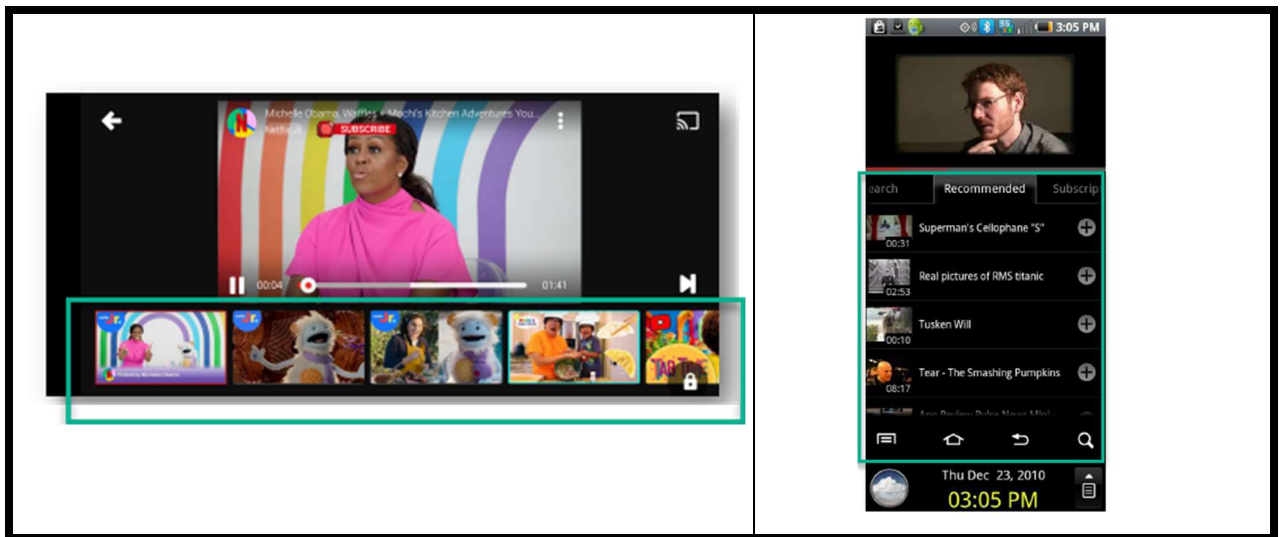
(ii) A List of Service-Recommended Videos Provided By The YouTube Cloud Infrastructure²

Additionally, “[t]his case falls squarely within the principle that a ‘patent may not, like a nose of wax, be twisted one way to avoid anticipation and another to find infringement.’” *CommScope Techs. LLC v. Dali Wireless Inc.*, 10 F.4th 1289, 1299 (Fed. Cir. 2021) (citations omitted). Specifically, during the patent showdown, the Court accepted Sonos’s

² Google presents this invalidity argument based on Sonos’s infringement positions. Sonos’s expert testified that the claimed “playback queue” does not require any data structure or storage space and is instead the “capability that provides a list of media items for playback.” Ex. 14 at 181:22-24, 216:20-217:4; *see also* Ex. 4 ¶128. Google does not agree and continues to understand that a playback “queue” is a specific type of data structure (see Dkt. 210-3 at 70), as Google argued during the showdown (Dkt. 316 at 9-10; Ex. 21 ¶ 203). If Google is correct, Google does not infringe. Ex. 21 ¶¶ 199-209. However, applying Sonos’s broad interpretation of the term “remote playback queue,” the claims are invalid.

1 argument that the list of multimedia content selected for playback need not be user-selected and
 2 could instead comprise a list of service-recommended media items. Dkt. 316 at 7-8. Sonos now
 3 applies the Court’s construction to accuse a list of “service-recommended media items provided by
 4 the YouTube cloud infrastructure” to a YouTube application on the user’s phone of being a “remote
 5 playback queue.” Dkt. No. 468-3 ¶ 129. But YTR1 and YTR2 also allowed users to select a list
 6 of service-recommended videos provided by the YouTube cloud servers for playback in the YTR
 7 on their phone. Ex. 11 ¶¶ 167-69, Dkt. No. 475-3 ¶¶ 76-81.

8 For instance, Sonos’s expert provides the image below in his infringement report to show
 9 that the YouTube Kids application purportedly infringes when it plays back a list of service-
 10 recommended media items (in the green box); the image on the right shows that the prior art YTR1
 11 application also allowed users to play back a list of service-recommended media items.



12 Ex. 11 ¶ 299. There is no material difference in this regard—Sonos cannot simultaneously argue
 13 that a list of service-recommended videos in the accused YouTube applications is a “remote
 14 playback queue,” and that a list of service-recommended videos in the prior art YTR application is
 15 not a “remote playback queue.” Dkt. No. 475-3 ¶¶ 76-81.

16 Sonos’s expert attempts to argue that playback of a list of service-recommended media items
 17 in the accused YouTube applications is different from that in the YTR prior art by claiming that “in
 18 order for any recommended videos to be played back” in the YTR prior art a user must first use “the
 19 ‘+’ icon that appears next to a recommended video” to add them to the their user-editable queue
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(i.e., the tab called “Queue” in the YTR application). Dkt. No. 467-5 at ¶ 328. This is wrong. Google’s expert provided public archived images showing that users can play recommended videos without using the + icon to add them to the user-editable queue and source code analysis confirming the same. Dkt. No. 475-3 ¶¶ 76-81. At deposition, Sonos’s expert was unwilling to confirm the accuracy of his opinion; when confronted with affirmative evidence that his opinion was wrong, he testified that he did not know whether that evidence was “real.” Ex. 19 at 66:15-68:19.

(b) Limitations 1.7

Limitation 1.7 recites that the computing device “transmit[s] an instruction for the at least one given playback device to take over responsibility for playback of the remote playback queue from the computing device, wherein the instruction configures the at least one given playback device to (i) communicate with the cloud-based computing system in order to obtain data identifying a next one or more media items that are in the remote playback queue, (ii) use the obtained data to retrieve at least one media item in the remote playback queue from the cloud-based media service; and (iii) play back the retrieved at least one media item.”

YTR2 discloses this limitation. When a user pressed the Connect button in their YTR application to transfer playback to a playback device, the prior art YTR application transmitted an “instruction” (e.g., a SET_VIDEO message is sent by the YTR application when in party mode) to the playback device. Ex. 11 ¶¶ 326-28. After a playback device received the instruction, it sent a message to the YouTube “Player Service” in the cloud to obtain one or more URLs (called “Bandaaid URLs”) that were used to retrieve the audio and video content of the next video in the party queue from Google’s Content Delivery Network (called “Bandaaid”). *Id.* ¶¶ 328-29. Thus, playback devices in the YTR system were configured to communicate with a cloud-based service (Player Service) to obtain “data identifying a next one or more media items that are in the remote playback queue” (Bandaaid URLs), “use the obtained data to retrieve at least one media item in the remote playback queue” (Bandaaid URLs were used to retrieve the content for a video in the party queue), and “playback the retrieved at least one media item” (playback the retrieved audio and video content), as required by Limitation 1.7.

1 Sonos argues that because the Lounge Server sends playback device(s) a copy of the party
 2 queue that contains the list of identifiers for the videos in the party queue prior to a user transferring
 3 playback, “the YTR System” does not “communicate *with the cloud-based computing system* in
 4 order to obtain data identifying a next one or more media items that are” in the party queue
 5 (Limitation 1.7(i)). Sonos’s argument misses the mark.

6 First, the claims make clear that the “data identifying a next one or more media items” is *not*
 7 a videoId listed in a queue—rather it is the data used to retrieve the audio and video content that is
 8 played back (the media item). Indeed, the claims recite that the playback device uses the “data
 9 identifying a next one or more media items” to “*retrieve* at least one media item” (Limitation 1.7(ii))
 10 and then “*play back* the retrieved at least one media item” (Limitation 1.7(iii)). At deposition,
 11 Sonos’s expert testified that in the accused YouTube system, Bandid URLs are used to retrieve the
 12 audio and video content (the media item) that is played back. Ex. 19 at 147:6-148:10 (playback
 13 device “uses one or more URLs . . . to retrieve the media item from one or more so-called Bandid
 14 servers”). The same is true in the YTR2 prior art.

15 Second, Sonos’s argument is inconsistent with the written description of the ‘033 patent,
 16 which equates a URL that is used to retrieve the audio and video content with the “data identifying
 17 a next one or more media items” that is claimed in Limitation 1.7:

18 [Z]one player 602 [i.e., playback device] may contain a uniform resource
 19 locator (URL) that specifies an address to a particular audio track in the
 20 cloud [i.e., data identifying a next one or more media items]. Using the
 21 URL, the zone player 602 may retrieve the audio track from the cloud
 [i.e., using the obtained data to retrieve at least one media item], and
 ultimately play the audio out of one or more zone players [i.e., play back
 the retrieved at least one media item].

22 Dkt. No. 1-3 (‘033 patent) at 11:65-12:4 (emphasis added).

23 Third, a system can include multiple pieces of information that are “data identifying a next
 24 one or more media items.” Thus, the ability of playback devices to store identifiers for the videos
 25 in the party queue does not mean that a Bandid URL is not also data identifying a next one or more
 26 media items that are in the party queue. Indeed, Sonos itself has argued that Bandid URLs satisfy
 27 this limitation. Ex. 14 ¶ 502 (accusing Google’s non-infringing alternative of infringing because a
 28 playback device would “obtain data (e.g., Bandid URL) identifying a next one or more media items

1 that are in the remote playback queue and the Receiver would still use the obtained data (*e.g.*,
2 **Bandaid URL**) to retrieve at least one media item in the remote playback queue”).

3 (c) Limitations 1.8 and 1.9

4 Limitations 1.8 and 1.9 require that the computing device “detect[] an indication that
5 playback responsibility for the remote playback queue has been successfully transferred” and that,
6 after detecting the indication, the computing device [1] controls “at least one given playback
7 device’s playback of the remote playback queue” and [2] is “no longer configured for playback of
8 the remote playback queue.” The YTR2 prior art discloses these limitations. When a user transfers
9 playback to a playback device(s), the YTR application
10 detects an indication that playback responsibility has been
11 successfully transferred and displays a “Connected to
12 Leanback screen” dialog. The YTR application also stops its
13 own playback and becomes a remote control that controls
14 playback of the playback queue on the playback device(s). This is shown in the screenshot above
15 from the YouTube video uploaded on 11/14/2010 (*see supra*, IV.B)



16 2. Device-Picker Limitations (Limitation 1.5-1.6)

17 Limitation 1.5 and 1.6 require that the computing device [1] “display[] a representation of
18 one or more playback device in a media playback system” that are available to accept playback
19 responsibility for the remote playback queue, and then [2] “receive[] [a] user input indicating a
20 selection of at least one given playback device from the one or more playback devices.”

21 During the patent showdown, the Court addressed a similar limitation in claim 13 of the ’615
22 patent: that the computing device [1] “display[s] . . . playback devices connected to the local area
23 network” and [2] receives a user input indicating “a selection of [a] particular playback device from
24 the identified playback devices connected to the local area network.” While the Court found that
25 the YTR application’s Connect button does not allow a user to select a subset of available playback
26 devices, the Court concluded that the ’998 patent “taught the ‘selection of the particular playback
27 device from the identified playback devices’ as contemplated by the ’615 patent.” Dkt. 316 at 16
28 (citing ’998 patent at 10:62-11:6). The Court concluded that it would have been obvious to add the

1 device-picker disclosed in the '998 patent to the YTR prior art. In doing so, the Court rejected
 2 Sonos's arguments that this disclosure in the '998 patent does not disclose a device-picker as a
 3 "contorted interpretation that does not convince." *Id.* at 16. The Court also rejected Sonos's
 4 arguments that it was not obvious to combine the YTR application with the teaching of the '998
 5 patent, noting that Google had produced a December 1, 2011 capture of the YTR application source
 6 code that implemented the device-picker. *Id.* at 17. It remains undisputed that the December 1,
 7 2011 capture of the YTR application source code discloses a device-picker, and that the device-
 8 picker was released to the public in January of 2012. *See supra* § IV.B.2. Nevertheless, Sonos
 9 rehashes essentially the same arguments that the Court rejected during the Patent Showdown. The
 10 Court should reject these arguments for the same reasons it did before. *Id.*³

11 **E. The Asserted Dependent Claims Of The '033 Patent Are Obvious**

12 Sonos asserts six dependent claims from the '033 patent: claims 2, 4, 9, 11, 13 and 16. For
 13 all but claim 4, Sonos merely incorporates its validity arguments for the independent claims of the
 14 '033 patent. Indeed, these dependent claims recite minor variations, and they are obvious based on
 15 the YTR application in view of the '998 patent. Ex. 11 ¶¶ 338-61.

16
 17 The only dependent claim for which Sonos raises an additional argument is claim 4. Claim
 18 4 recites that the representation of the one or more playback devices recited in Limitation 1.5 be for
 19 a "group of playback devices... that are to be configured for synchronous playback." This limitation
 20 was obvious in view of the YTR2 prior art for at least two reasons. First, as the Court has already
 21 found, it was obvious to use a device-picker with the YTR2 prior art. *See supra* § IV.B.2. It was
 22 obvious for the user interface of the device-picker to combine two or more entries into an icon for a
 23 group of playback devices. Because the device-picker disclosed by the YTR patent already
 24 discloses that it can be used to select and transfer playback to multiple playback devices,
 25 representing those multiple playback devices using a single icon on the user interface would have

26
 27 ³ For the '615 patent that was at issue during the patent showdown, Sonos claimed an earlier
 28 invention date of July 15, 2011. For the '033 patent, however, Sonos no longer claims an earlier
 invention date. The priority date of the '033 patent is December 30, 2011. Thus, the obviousness of
 combining the device-picker with the YTR prior art is even stronger for the '033 patent than the
 '615 patent because the implemented and released device-picker is itself prior art. Ex. 12 ¶¶ 59-61.

1 been a straightforward change. *Id.* The user interface would simply display a single icon that when
 2 pressed would function as if the user has selected the individual icons of the group. *Id.* A POSITA
 3 would have recognized that allowing the device-picker to display an icon that represents a group of
 4 playback devices would be beneficial because it would allow a user to select and transfer playback
 5 to multiple devices with a click of a single icon, rather than having to select the icon for the multiple
 6 devices separately. *Id.* ¶ 343. In fact, the Connect button in YTR1 and YTR 2 was used to transfer
 7 playback to a group of playback devices. By the time of Sonos’s invention the ability to provide an
 8 icon for transferring playback to a group of playback devices (e.g., a “speaker group”) was known
 9 in the art. Ex. 11 ¶¶ 644-46; U.S. Patent No. 8,724,600 at Fig. 4B. In fact, the ’966 and ’885 patents
 10 (discussed below) are prior art to the ’033 patent and make clear that an icon for invoking a group
 11 of playback devices was not novel or non-obvious by the time of the ’033 patent. Second, as shown
 12 in a prior art video, a single entry in the device-picker can represent a group of playback devices
 13 configured for synchronous playback (e.g., a Living-room TV and a second device such as a
 14 computer that are wired together). See <https://www.youtube.com/watch?v=5VFluR9pJdo> at 0:24-
 15 0:40; Ex. 11 ¶ 342 (screenshot from video showing user wiring his TV to a computer for
 16 synchronous playback).

17 **F. The Asserted Claims Of The ’885 Patent And ’966 Patent Are Invalid⁴**

18 Claim 1 of the ’885 patent⁵ and all asserted claims of the ’966 patent are invalid as obvious
 19 over Sonos’s 2005 speaker system in view of modifications suggested to Sonos by users of that
 20 system. Sonos generally asserts that naming and saving speaker groups (called “zone scenes”) was
 21 the primary innovation of the asserted patents over the prior art. But this idea was plainly obvious
 22 at the time of the invention. Users of the Sonos 2005 system (including the purported inventor of
 23 the asserted “zone scenes” patents) were frustrated by having to frequently recreate speaker groups
 24

25 ⁴ Google also contends that the asserted claims are invalid over prior art systems from Logitech
 26 and Bose, and in combination with other prior art references. Google intends to present these
 arguments at trial if summary judgment is not granted.

27 ⁵ Claim 1 of the ’885 patent was selected by Sonos for litigation during the patent showdown.
 28 After the Court ruled that Google infringed the claim (Dkt. 309), the Court *sua sponte* granted
 summary judgment of validity. Dkt. 382. Google requested reconsideration of that order, which is
 now fully briefed. Dkts. 445, 448, 457.

1 they had previously created but could not save. *E.g.*, Ex. 1 ¶ 18, Ex. 13. So ordinary Sonos users
 2 explicitly requested that Sonos modify the system to include the ability to create and save speaker
 3 groups and all of the claimed elements for doing so. *Infra* § IV.F.2. Sonos’s prior art products, as
 4 modified by users’ suggestions on Sonos’s forums, thus render the purported inventions obvious.

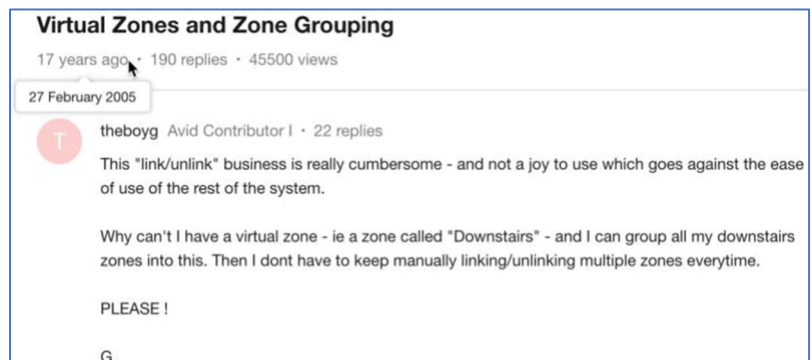
5 1. Sonos’s 2005 System

6 The Sonos prior art system launched no later than January 2005, when Sonos publicly
 7 announced that it had shipped to customers. Ex. 6 ¶ 265. Because the claimed earliest effective
 8 filing date for the ’885 and ’966 patents is September 2006, the Sonos prior art system constitutes a
 9 statutory bar under 35 U.S.C. § 102(b).

10 There is no dispute that the Sonos 2005 system included the building blocks of the purported
 11 inventions claimed in the ’885 and ’966 patents. That system included “smart” speakers, speaker
 12 grouping with synchronous playback, controllers sending music and grouping-related instructions
 13 to speakers, and user interfaces providing grouping and playback functionality. Ex. 6 ¶¶ 265-
 14 66. Indeed, the parties agree that the Sonos 2005 system disclosed elements 1.0 through 1.4 of the
 15 ’885 patent and elements 1.0 through 1.2 of the ’966 patent. *E.g.*, *id.* ¶ 241; Dkt. 468-7 at 41-43,
 16 85-88 (validity contentions).

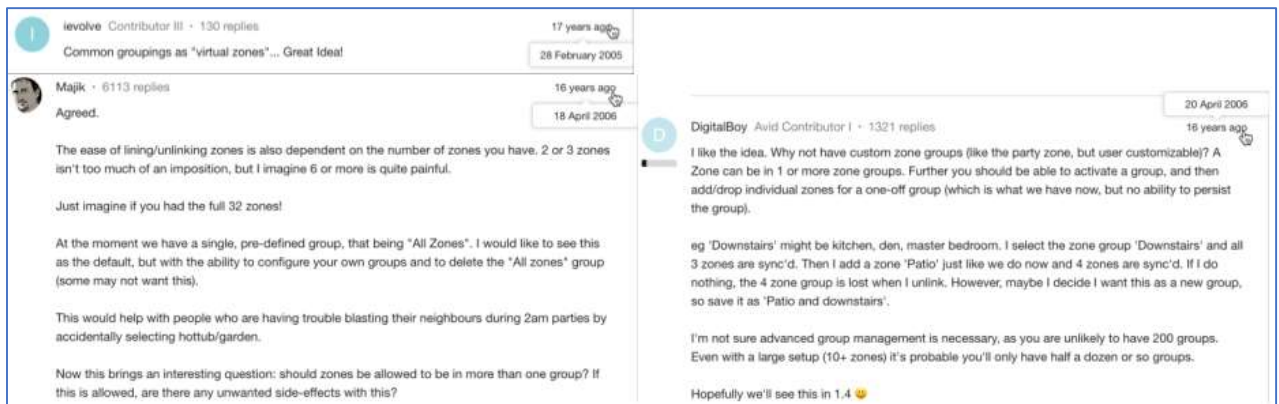
17 2. Sonos Forum Threads

18 Sonos’s online forums allowed users to discuss Sonos products, suggest features, report
 19 issues, and generally collaborate with Sonos and other Sonos customers. *E.g.*, Ex. 7 at 48:23-49:9;
 20 73:8-12. Two threads from these forums are particularly relevant here. In the first, “Virtual Zones
 21 and Zone Grouping,” “theboyg” stated that the way the Sonos 2005 system permitted users to create
 22 groups—by linking and unlinking speakers in real time—was “cumbersome.” Ex. 6 ¶ 193. He
 23 suggested adding to the prior art
 24 system “a virtual zone – ie a zone
 25 called ‘Downstairs’” that would
 26 allow a user to “group all [his]
 27 downstairs zones” and avoid the
 28 necessity to “keep manually



linking/unlinking multiple zones everytime.”

Another user agreed that the ability to save often-used speaker groups as “virtual zones,” was a “great idea.” *Id.* And another user commented that such functionality—*i.e.*, “user-customizable” “zone groups”—would be “what we have now” in the Sonos 2005 system but with the added “ability to persist [*i.e.*, save] the groups”; this user also confirmed that such functionality could allow the addition of a speaker to “1 or more zone groups,” thereby creating, saving, and naming overlapping groups of speakers:



The second relevant Sonos forum thread is titled “Macro/Presets.” *Id.* ¶ 192. In that thread, “JeffT” suggested that the Sonos 2005 system “save Zone links [*i.e.*, speakers linked into a group] as favorites” so that, for example, he could set up “2 party modes, Summer and Winter,” where the “Summer mode” would include “the deck speakers and the Winter mode would not.”

Macro / presets

16 years ago • 61 replies • 15135 views

22 September 2005



JeffT Trending Lyricist I • 20 replies

Just got the intro bundle, and I am impressed. I did a search and did not find this suggested, but I would save Zone links as favorites. With only 2 ZPs it is not a problem yet, but when I add more it maybe. I would like to setup say Morning mode for the units I want in the morning and a preset volume between the units. Another example I would have 2 party modes, Summer and Winter. The Summer mode would include the deck speakers and the Winter mode would not. Also it would be nice to have playlists or radio station associated with each mode. So when I get up I press Morning the DI Chill radio station plays.

Jeff

As the timestamps show, all of the posts were created and publicly available prior to Sonos’s September 12, 2006 provisional filing date (and still are) and therefore are prior art under 35 U.S.C. § 102(a) or (b). Sonos is not entitled to its claimed conception date of December 2005, but even if it were, the posts relied on for this summary judgment motion predate the purported conception and

1 are therefore prior art at least under 35 U.S.C. § 102(a). Because the Sonos forum posts expressly
 2 discuss modifying the Sonos 2005 system, there is a clear motivation to combine the prior art system
 3 and the users' suggested modifications to that system. *See Optivus Technology, Inc. v. Ion Beam*
 4 *Applications S.A.*, 469 F.3d 978, 990-91 (Fed. Cir. 2006); Ex. 8 ¶ 354.

5 3. Sonos Prior Art System + Forums Disclose Claim 1 Of The '885 Patent

6 To the extent not disclosed in the Sonos 2005 prior art system itself, user comments on the
 7 Sonos forums disclose the "zone scene" elements of claim 1 of the '885 patent.

8 Limitation 1.5 requires a speaker to be "operating in a standalone mode." There is no dispute
 9 that a user could play music to individual players in the Sonos 2005 system, thereby satisfying this
 10 limitation. Ex. 6 ¶ 186. Furthermore, the Sonos forum posts suggest a departure from the Sonos
 11 2005 "linking" features, which automatically transitioned an individual speaker to its linked group
 12 rather than allowing the speaker to remain in standalone mode. *See id.* ¶ 506 (describing effect of
 13 linking feature); Ex. 8 ¶ 360. In other words, not only was standalone mode present in the Sonos
 14 2005 system, but the users of that system suggested that the speakers remain in standalone mode
 15 while being added to a "zone scene," as required by Limitations 1.6, 1.7, and 1.8, as discussed
 16 below. Furthermore, it is clear that the Sonos users were contemplating creating "zone scenes" for
 17 use in the future, rather than immediately, given that they were directed to scenes that would only
 18 be "invoked" later such as the "romantic dinner" or "entertaining" scene. Ex. 6 ¶ 273.

19 Limitation 1.6, which generally requires the speaker to receive an indication it has been
 20 added to a first zone scene, was also disclosed by the Sonos 2005 system in combination with the
 21 Sonos forums. In the Sonos 2005 system, the controller (either handheld or desktop software) sent
 22 an indication to the zone player that it has been added to a speaker group. Ex. 9 ¶ 353. Specifically,
 23 the zone player that was added by the user would receive a message and would then automatically
 24 configure itself for synchronous playback as part of that speaker group during the period of time
 25 that the speaker group was activated. *Id.* ¶ 355-57. As a result, the only aspect of Limitation 1.6
 26 that is arguably missing from the Sonos prior art system is saving the "zone scene" so that it can
 27 later be "invoked." But this very aspect of Limitation 1.6 was proposed to Sonos by users of Sonos's
 28 prior art system, who suggested before the conception date that the Sonos prior art product be

1 modified to allow them to save their favorite speaker groups so that they did not need to keep
 2 manually recreating those groups. For example, in February 2005, users suggested adding a “virtual
 3 zone – i.e., a zone called ‘Downstairs’” to “group all my downstairs zone[s] into this,” which would
 4 allow the user to avoid “manually linking/unlinking multiple zones everytime.” *Supra* § IV.F.2.

5 Limitation 1.7 effectively requires that two zone scenes overlap, with the first zone player
 6 being a member of both the first “predefined grouping” of zone players and the second “predefined
 7 grouping” of zone players. In the prior art Sonos 2005 system, a speaker could already be grouped
 8 together with any other speaker to form a group that overlapped with the pre-set “party mode.” *E.g.*,
 9 Ex. 8 ¶¶ 107, 114, 342. Users of the system explicitly suggested adding functionality for the creation
 10 and saving of additional overlapping zone scenes—*i.e.*, to allow a user to “have 2 party modes,
 11 Summer and Winter,” where the Summer group “would include the deck speakers and the Winter
 12 mode would not,” thereby creating saved, named, overlapping speaker groups. Others similarly
 13 suggested allowing speakers to “be in 1 or more zone groups.” *Supra* § IV.F.2.

14 Limitation 1.8 generally requires that after two speaker groups are created and the speakers
 15 are notified of the groupings, a speaker within those groups continues to operate individually until
 16 the user invokes one of the groups. As discussed, in the Sonos prior art system, speakers that were
 17 available in the “party mode” group would continue to play music individually until that party mode
 18 group was invoked for playback. Accordingly, setting aside the requirement to save groups as “zone
 19 scenes” (addressed in Limitations 1.6 and 1.7), the prior art system already included “standalone
 20 mode” speakers within the “party mode” group. The Sonos forums clearly disclosed the remainder
 21 of this element as user posts discussed saving a speaker group as a “favorite” and later “invoking”
 22 it. Sonos argued and the Court accepted at summary judgment that saving and later invoking a
 23 speaker group adequately disclosed the “standalone mode” element. Dkt. 309 at 16-17. The prior
 24 art discloses the same and thus meets this claim element. *See Novo Nordisk Pharm., Inc. v. Bio-*
 25 *Technology Gen. Corp.*, 424 F.3d 1347, 1355 (Fed. Cir. 2005) (holding section 102 does not require
 26 one skilled in the art to “use” the invention as to an anticipatory disclosure.”) (cleaned up).

27 Limitations 1.9 and 1.10 essentially require that once a speaker group has been selected, the
 28 speakers within that group will perform synchronous playback regardless of whether they were in

1 “standalone” mode previously. There is no dispute that once a speaker group is invoked in the
 2 Sonos prior art system, each of the speakers within that group will commence synchronous
 3 playback. Ex. 3 ¶ 127 (“[E]ach of the ‘zone players’ in the networked multi-zone audio system
 4 described in the ’885 Patent (and in Sonos’s own system at the time) was capable of being grouped
 5 together with one or more other ‘zone players’ so that the grouped ‘zone players’ become configured
 6 for synchronous playback.”). That the claimed groups are saved and named (i.e., “predefined”) is
 7 disclosed by the same Sonos forum posts discussed above for the same reasons as discussed above.

8 4. Sonos Prior Art System + Sonos Forums Disclose The Asserted Claims Of
 9 The ’966 Patent

10 The independent claims of the ’966 patent cover much the same subject matter as claim 1 of
 11 the ’885 patent, except that the ’966 patent claims are drafted from the perspective of the controller
 12 device rather than the speaker device. Because the Sonos 2005 system and the Sonos forums are
 13 directed to system prior art which includes both controllers and speakers, the same disclosures are
 14 applicable to both the ’885 claims (speakers) and the ’966 claims (controllers). For example, the
 15 Sonos 2005 system discloses sending messages from the controller to the speakers to configure
 16 those speakers to join a zone scene. This disclosure is equally applicable to Limitation 1.6 of claim
 17 1 of the ’885 patent and Limitations 1.3 and 1.4 of the ’966 Patent claims. Google has attached as
 18 Exhibit 10 a comprehensive chart identifying how the disclosures meeting the ’885 patent claim
 19 elements discussed above also render obvious the asserted claims of the ’966 Patent.

20 **G. Google’s Redesigned Devices Do Not Infringe The Asserted Claims Of The**
’885 And ’966 Patents⁶

21 In September 2022, this Court granted summary judgment of infringement with respect to
 22 claim 1 of the ’885 Patent. Dkt. 339. Thereafter, Google began changing its products, implementing
 23 an alternative design that it had disclosed to Sonos during discovery. Ex. 5 ¶¶ 42-44. This alternative
 24 design does not infringe the asserted claim of the ’885 Patent (claim 1) or the asserted ’966 claims.

25 1. Claim 1 of the ’885 Patent

26
 27 ⁶ Google further contends and will argue at trial that the pre-redesign and post-redesign products
 28 do not infringe any asserted claims of the ’966 Patent for additional reasons, including because
 Sonos has failed to offer admissible evidence of direct and indirect infringement for every claim
 element and because the accused products do not meet multiple claim elements.

1 Claim 1 of the '885 patent includes the following two limitations:

2 while operating in a standalone mode in which the first zone player is configured to
3 play back media individually in a networked media playback system comprising
the first zone player and at least two other zone players:

4 . . .

5 after receiving the first and second indications, continuing to operate in the
6 standalone mode until a given one of the first and second zone scenes has been
selected for invocation

7 The Court has held that, “[i]n plain English, these limitations explain that an individual smart
8 speaker that has been added to a speaker group will continue to operate individually — *i.e.*, in
9 ‘standalone mode’ — until the speaker group of which it is a member is activated by the user, at
10 which point the individual speaker will transition to being controlled as part of the group.” Dkt. 309
11 at 15. In other words, “the zone player operates on its own before a zone scene is invoked, at which
12 point it acts ‘in accordance with’ the group.” *Id.* at 17. Claim 1 of the '885 patent thus requires: (i)
13 that a speaker be operating in standalone mode, (ii) that the speaker continue to operate in standalone
14 mode after being added to a group, and (iii) that the speaker transition to being controlled as part of
15 a group only after the group is activated by the user.

16 2. The Redesign Does Not Infringe Claim 1 Of The '885 Patent

17 As noted above, after the Court’s order on claim 1 of the '885 patent, Google developed and
18 began deploying changes to the way its products operate. In the redesigned systems, when an
19 updated speaker that is operating individually is added to a group, that speaker (i) immediately stops
20 any operation and (ii) transitions to being controlled as part of the group if operating. Ex. 1 ¶ 100
21 (“When a speaker is added to a group, one of the steps taken is to add the speaker to the group such
22 that it conforms to the behavior of the group.”); *see also id.* ¶¶ 88, 90, 91. As a result: when an
23 individual speaker playing The Beach Boys is added to a speaker group playing The Beatles, the
24 individual speaker stops playing The Beach Boys and starts playing The Beatles; when an individual
25 speaker playing The Beach Boys is added to a speaker group that is not playing anything, the
26 individual speaker stops playing The Beach Boys and does not play anything; when an individual
27 speaker that is not playing is added to a speaker group that is playing The Beatles, the individual
28 speaker starts playing The Beatles; and when an individual speaker that is not playing is added to a

1 speaker group that is not playing, the individual speaker does not play, in accordance with the
 2 group. *See id.* ¶¶ 88, 90, 91, 100. Because an individual speaker now “acts ‘in accordance with’
 3 the group” as soon as it is added to the group—rather than continuing to operate individually until
 4 the group is invoked—Google’s new design does not infringe claim 1 of the ’885 patent.

5 Indeed, Sonos *agrees* that there is no infringement of claim 1 of the ’885 patent when—in
 6 the context of the new design—an individual speaker is added to a group while the group is
 7 playing. *See, e.g.*, Ex. 2 at 30. Sonos contends, however, that the new design infringes claim 1 of
 8 the ’885 patent when an individual speaker is added to a group that is not playing. *E.g., id.* ¶
 9 66. Sonos’s position should be rejected as a matter of law.

10 The operation of the new design is not in dispute. When an individual speaker is joined to
 11 a group, two things happen. First, the `StopCurrentApp()` function immediately terminates the
 12 current operation of the individual speaker. *Id.* ¶ 93. So if the individual speaker is playing content
 13 from YouTube Music, and that individual speaker is joined to a group, `StopCurrentApp()` terminates
 14 the operation of YouTube Music on that speaker, causing the individual speaker to stop
 15 playing. *E.g., id.* ¶ 89. Second, the `AddGroup()` function adds the individual speaker to the group
 16 and integrates the individual speaker into that group’s “leader election” process (*i.e.*, the selection
 17 of the speaker that controls the group). *Id.* ¶ 77. Through this process, the individual speaker either
 18 receives a command to start doing what the group is doing or receives no command if the group is
 19 not doing anything. *E.g., id.* ¶ 70, 72. Accordingly, in the scenario in which an individual speaker
 20 playing The Beach Boys is joined to a group that is not playing: `StopCurrentApp()` terminates the
 21 operation of the speaker in standalone mode (causing The Beach Boys to stop playing); `AddGroup()`
 22 joins the speaker to the non-playing group; and the speaker receives no command to play, because
 23 the group is not playing. There is thus no infringement because: (i) the speaker operating in
 24 standalone mode does not continue to operate in standalone mode after being added to a group and
 25 (ii) the speaker immediately transitions to being controlled as part of a group, playing nothing
 26 because the group is playing nothing.

27 Similarly, in the scenario in which an individual speaker is not playing and is joined to a
 28 group that is not playing: the speaker calls the `StopCurrentApp()` command (although there is no

operation of the speaker to terminate); **AddGroup()** joins the speaker to the non-playing group, which causes the group to elect a new leader; and the speaker receives no command to play, because the group is not playing. Here, there is no infringement because: (i) the speaker is not operating in standalone mode when it is added to the group and (ii) the speaker transitions to being controlled as part of a group, playing nothing because the group is playing nothing.

Sonos's argument that these two scenarios are infringing is rooted in the (erroneous) notion that every speaker that is not playing is, by "default," in "standalone" mode. *See, e.g., id.* ¶¶ 50, 52; Ex. 3 ¶ 410. But Sonos does not and cannot cite any evidence to support that notion, because a speaker that is not doing anything is not *in any mode*: it is neither in "standalone mode" nor in what Sonos now refers to as "grouped mode"; it is simply dormant until it is configured for playback either individually (if a user selects an individual speaker for playback) or as part of a group (if a user selects a group of speakers for playback). Indeed, in Sonos's own expert's opinion, a speaker is not configured for playback—and is thus not in any mode—until it receives "an instruction . . . to take over responsibility for playback"; put another way, a speaker is "no longer configured for playback" when it "stops its playback." Ex. 4 ¶ 170. Sonos's attempt to simply label all non-operating speakers as "standalone mode" speakers should be rejected.

Even if the mis-labeling were not rejected, however, Sonos's infringement theory would still fail, because—in the new design—an individual speaker "acts 'in accordance with' the group" as soon as it is added to the group. As Sonos concedes, there is no infringement when a speaker is added to a group that is playing The Beatles: the speaker starts playing The Beatles *because* the group is playing The Beatles. Ex. 5 ¶ 59. Similarly, there is no infringement when a speaker is added to a group that is not playing: the speaker does not play *because* the group is not playing. In both cases, immediately upon being added to a group, the speaker's behavior matches the group's behavior. Google's new design does not infringe claim 1 of the '855 patent and summary judgment of non-infringement should be granted.

3. The New Design Of The Accused Products Does Not Infringe The Asserted Claims Of The '966 Patent For The Same Reasons

Each asserted claim of the '966 patent requires that a "first zone player" (*i.e.*, speaker)

continues to be “operating in a standalone mode” throughout the speaker group creation steps, including the “creation of the first zone scene.” But, as discussed above, when each individual speaker is added to a group, it ceases to continue operating in a standalone mode because that individual speaker is stopped, its playback configuration is terminated, and it begins to match the behavior of the group to which it is joined. Accordingly, summary judgment of non-infringement with respect to the asserted claims of the ’966 patent is appropriate.

V. GOOGLE DID NOT WILLFULLY OR INDIRECTLY INFRINGE

Last March, this Court found that Sonos “ha[d] failed to adequately allege” willful and indirect infringement in its Second Amended Complaint. *Sonos, Inc. v. Google LLC*, 591 F. Supp. 3d 638, 647 (N.D. Cal. 2022) (“MTD Order”). Neither the draft complaint Sonos served the day before filing this suit nor the “various correspondence Sonos sent to Google” regarding *unasserted* Sonos patents was sufficient for the requisite knowledge of the patents or of infringement. *Id.* at 9, 11. However, in light of a “special twist” that “Google had commenced its own declaratory relief claim first,” the Court permitted Sonos to amend its complaint to plead “that the infringer had sufficient time to analyze the accused product vis-à-vis those patents” as a proxy for the existence of a cease-and-desist letter or some other actual pre-suit knowledge. *Id.* at 8. Consequently, Sonos added an allegation that “[i]n order . . . to have formed a reasonable belief as to Google’s alleged non-infringement of the asserted patents in time for its filing on September 28, 2020, Google was conducting its investigation days, weeks, or months prior to September 28, 2020,” with the hopes that discovery would reveal as much. *Sonos, Inc. v. Google LLC v. Sonos, Inc.*, No. 3:21-cv-7559-WHA, Dkt. 211 ¶ 60 (N.D. Cal. July 8, 2022) (“Transferred Action”).

Nine months later, Sonos is no closer to providing any evidence that Google had “knowledge of the patent,” “knowledge of infringement,” or “a *specific intent* to infringe at the time of the challenged conduct.” MTD Order at 643 (emphasis added); *id.* at 648 (“[T]he complaint will not generally be adequate to serve as notice for either willful or indirect infringement.”). Indeed, Sonos concedes as much, referring in its interrogatory responses to the same insufficient “proof” of pre-suit knowledge that it previously cited: (1) speculation that Google had somehow known that Sonos filed patents directed to the now-accused features; (2) the parties’ correspondence about *unasserted*

1 patents from 2016 to 2019; (3) Sonos’s service of pre-filing copies of its complaints; and (4) Sonos’s
 2 identification of *unasserted* patents that “share a common specification” with certain asserted
 3 patents in licensing negotiations.⁷ As this Court has already held, none of this is sufficient to show
 4 pre-suit notice or knowledge. MTD Order at 643, 646, 647.

5 Nor does the “special twist” at the pleading stage save Sonos’s willfulness and indirect
 6 infringement claims now. First, and critically, Google did not file for declaratory judgment for the
 7 ’885 patent—issued over two months after Google’s complaint was filed and added by Sonos after
 8 this litigation had commenced via its Second Amended Complaint. Transferred Action, Dkt. 51-45
 9 at 1. Second, Sonos has failed to offer any evidence that Google started its investigation into the
 10 ’033 and ’966 patents *before* receiving Sonos’s draft complaint on September 28, 2020. Since
 11 Google and its outside counsel had previous familiarity with the accused products vis-à-vis other
 12 pending litigation with Sonos, they had the product knowledge necessary to quickly ascertain that
 13 at least one claim limitation from the ’033 and ’966 patents was missing. *See Apple Inc. v. Princeps*
 14 *Interface Techs. LLC*, 2020 WL 1478350, at *4 (N.D. Cal. Mar. 26, 2020) (“filing an action seeking
 15 a declaratory judgment of noninfringement . . . arguably asserts a ‘reasonable, good-faith belief in
 16 noninfringement’”). Sonos’s failure to offer any evidence of Google’s pre-suit knowledge of the
 17 asserted patents compels summary judgment of no willful or indirect infringement. *See, e.g., Power*
 18 *Integrations, Inc. v. ON Semiconductor Corp.*, 396 F. Supp. 3d 851, 891 (N.D. Cal. 2019) (granting
 19 summary judgment of no willful infringement where patent owner did not produce evidence that
 20 alleged infringer had pre-suit notice); *Cybiotronics, Ltd. v. Golden Source Elecs. Ltd.*, 130 F. Supp.
 21 2d 1152, 1166 (C.D. Cal. 2001) (granting summary judgment of no induced or contributory
 22 infringement because there was no evidence defendant knew of the patent prior to the lawsuit).

23 **VI. CONCLUSION**

24 For the foregoing reasons, Google respectfully requests that the Court grant Google’s motion
 25 for summary judgment.

27 ⁷ The relevant asserted patents (the ’615, ’206, and ’460 patents) have all been invalidated or
 28 dismissed from this action. Additionally, Sonos mentions an unrelated litigation before the
 International Trade Commission involving entirely different patents.

1
2 DATED: February 6, 2023

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3
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CERTIFICATE OF SERVICE

Pursuant to the Federal Rules of Civil Procedure and Local Rule 5-1, I hereby certify that, on February 6, 2023, all counsel of record who have appeared in this case are being served with a copy of the foregoing via the Court's CM/ECF system and email.

/s/ Charles K. Verhoeven

Charles K. Verhoeven